mainland S. E. Asia had much heavier streaking on the underparts, particularly on the flanks, and the crown slightly more streaked on most individuals, though the back coloration showed a great deal of individual variation. *M. p. forbesi* from the Philippines was closest in all respects to the Sabah birds. Some specimens were nearly identical in coloration to the Lahad Datu specimen, and the breast streaking, although variable, was always light. Several individuals observed carefully in the field at Tempassuk Plain were also distinguished by greyish underparts with very little streaking on the breast, supporting allocation of the whole Sabah population to *M. p. forbesi*.

The likely dispersal mechanisms of the species are not well known. The nearest breeding population is in the Philippines on Mindanao (Bruce 1980), at least 250 km from the Lahad Datu population. Immature birds may regularly engage in post-fledging dispersal movements and individuals may at times be storm-driven to Sabah. The disjunct distribution of birds at Tempassuk and Lahad Datu, c.180 km apart, suggests that the birds are in fact quite vagile and that they may readily be capable of filling suitable habitat as it becomes available.

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References

Bruce, M. D. 1980. A Field List of the Birds of the Philippines. Sydney: Traditional Explorations.

King, B. F., Dickinson, E. C. & Woodcock, M. W. 1975. A Field Guide to the Birds of South-East Asia. London: Collins.

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## A new subspecies of White Bellbird *Procnias alba* (Hermann) from southeastern Amazonia

## by David C. Oren and Fernando C. Novaes

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A population of White Bellbirds *Procnias alba* (Hermann) inhabits the Serra dos Carajás, Pará, in southeastern Brazilian Amazonia (Roth *et al.* 1984). The species is otherwise Guianan in distribution (Snow 1973, 1982, Haffer 1978); the only previous record south of the Amazon is Wallace's (1853) from the vicinity of the city of Pará (Belém). Snow (1973) considers Wallace's record so puzzling that he explicitly omits it in his treatment of the geographical distribution of the species. In light of the discovery of this bellbird in Carajás, Wallace's birds may now be interpreted as wanderers from this southern population.

Three adult male specimens from Carajás in the Museu Paraense Emílio Goeldi (MPEG) collection have significantly larger bills than northern conspecifics. Bellbirds are obligate frugivores and the size of the bill is of great adaptive significance, as it determines the maximum diameter of exploitable fruits (Snow

1973). The absence of any overlap in bill length and gape measurements in the 2 populations of *P. alba* makes them easily distinguishable and justifies the designation of a new trinomen.

Procnias alba wallacei subsp. nov.

Holotype. Adult & (MPEG # 35043) from manganese mine south of N1 camp (elevation 700 m), Serra dos Carajás, Pará (1°27'S, 48°29'W), Brazil. Collected by Manoel Santa Brígida on 26 August 1983.

Paratypes. 2 adult & 's (MPEG # 35042 and # 35302) from manganese mine south of N1 camp and main road near N2 camp, respectively (both 700 m), Serra dos Carajás (c.6°5, 50°30′W), Pará, Brazil, collected on 25 August and 10 September 1983.

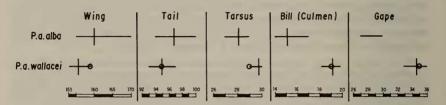


Figure 1. Ranges and means (mm) of mensural characteristics of *P. a. alba* and *P. a. wallacei*; data for *P. a. alba* from Snow (1973, 1982), who did not publish a mean for gape (maximum diameter of exploitable fruit plus 3 mm); wing measure is flattened; values for holotype circled.

Description. Male resembles *P. a. alba* in plumage and details of the wattle, which arises form the base of the culmen. Differs from the nominate form in that the wing and tail are somewhat shorter, while the tarsus and bill are significantly larger. Female unknown.

Remarks. According to Snow (1982: 171) the bill of *Procnias* is "generally described as black in all species". The 3 specimens of *P. a. wallacei* had the upper bill black and the lower mandible grey with a black tip. This might be another character to distinguish the southern population; however, the bill of an adult male *P. a. alba* (MPEG # 32489) from Rio Paru do Leste, northern Pará, collected on 20 November 1978 also had the lower mandible grey (Novaes 1980:43). The lower mandible rapidly changes to black following death, and it seems probable that in life the lower mandible is grey in all *P. alba*.

The 2 *P. a. wallacei* taken in August weighed 219 g and 222 g, slightly more than 3 male *P. a. alba* (Snow 1982). Their stomachs contained 2 large round yellow drupes of Burseraceae with stones 16–19 mm in diameter (# 35043) and dark red oval drupes of Meliaceae 10–15 mm in length (# 35042).

Distribution. Known from the type locality and the vicinity of Belém, Pará, Brazil

Etymology. It is a pleasure to name this subspecies for Alfred Russel Wallace (1823-1913), who first observed birds of this race in July 1849 near Belém.

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References:

Haffer, J. 1978. Distribution of Amazon forest birds. Bonn. Zool. Beitr. 29: 38-78.

Novaes, F. C. 1980. Observações sobre a avifauna do alto curso do rio Paru do Leste, Estado do Pará, Bol. Mus. Paraense E. Goeldi, n.s., Zool. 100: 1-58.

Roth P., Oren, D. C. & Novaes, F. C. 1984. The White Bellbird, Procnias alba, in the Serra

do Carajás, southeastern Pará, Brazil. Condor 86: 343-344.

Snow, D. W. 1973. Distribution, ecology and evolution of the bellbirds (Procnias, cotingidae). Bull. Brit. Mus. Nat. Hist. (Zool). 25: 367-391.

— 1982. The Cotingas. Ithaca, N.Y.: Cornell University Press.

Wallace, A. R. 1853. A Narrative of Travels on the Amazon and Rio Negro. London: Ward,

Lock & Co.

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## Soft-plumaged Petrels Pterodroma mollis at Great Salvage Island

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The present status of the endangered North Atlantic races of the Soft-plumaged Petrel Pterodroma mollis is of great concern (King 1981, Bourne 1983). It has recently been proposed that they be recognised as good species (Bourne 1983), with P. feae nesting on Bugio (Desertas) and the Cape Verde Islands, and P. madeira nesting on Madeira. We report here the occurrence of one of these forms, probably P. feae, at Great Salvage Island (30°9'N, 15°52'W), 300 km south of the Madeiran group, on the nights of 19 and 20 June 1983.

On both occasions, birds were heard calling in flight for several minutes at about 01.00 local time at the southwestern end of the island just below the plateau. They flew away from us towards the centre of the island where their calls were lost in the background noise. The calls were quite unlike those of the resident seabird species, but virtually identical to those recorded of P. mollis by M. K. Swales at Gough Island (BBC disc 25008), a copy of which we had with us at the time. A sonagram of Swale's recording is reproduced in Cramp & Simmons

(1977).

Despite the fact that the calls resembled those of P. mollis, it is more likely that we heard either P. madeira or P. feae, given the proximity of their respective breeding places. It should be noted that even the calls of the form found in New Zealand resemble those of *P. mollis* on Gough (Warham 1979). Not surprisingly, the phonetic descriptions of the calls of P. feae and P. madeira are variable (Bourne 1955, Jouanin et al. 1969, van den Berg & de Wijs 1980), although that of Jouanin et al. (1969), describing P. feae's as a long wail, fits what we heard exactly. From this, and the larger numbers and range of P. feae over P. madeira, it is more likely that the birds we heard were P. feae.

If the birds were P. feae, the timing of their appearance at Great Salvage Island coincided with their pre-laying period on Bugio, some 250 km to the north (Jouanin et al. 1969). As the presence of these birds on Great Salvage Island has not been reported before, it is possible that they were prospecting individuals